A BIOGEOGRAPHIC ASSESSMENT OF LIVING MARINE AND CULTURAL RESOURCES OF THE OLYMPIC COAST NATIONAL MARINE SANCTUARY

In Support of the OCNMS Management Plan Review

GOAL

Characterization of oceanographic processes and biological resources of the Olympic Coast marine ecosystem through the synthesis of spatial data. Ultimately, these data will be integrated into a comprehensive biogeographic assessment to support OCNMS Management Plan Review.

PROJECT OVERVIEW



In the near future, OCNMS will begin a process to update its Management Plan. NOAA's Biogeography (BP) Program will support OCNMS by conducting a two-vear collection and assessment for the marine waters within and adjacent to the Sanctuary's boundary. The process will consist of gathering existing biological, and environmental data from all available sources. Data extent, quality, and position within the study area will be evaluated.

formatted, and assimilated into a Geographic Information System (GIS). Modeling, data integration, and a quantitative assessment of the biota and habitat resources will follow at the conclusion of data synthesis. The results of this work will be used to identify potentially important ecological areas and time periods.

The OCNMS biogeographic assessment will complement and build upon a similar efforts currently being conducted by the BP for three sanctuaries in California (Cordell Bank, Gulf of the Farallones, and Monterey Bay National Marine Sanctuaries). The biogeographic assessment for these sanctuaries was conducted to identify important biological zones, time periods, and ecological linkages from Point Arena south to Point Sal. For more information:

 $http://galapagos.nos.noaa.gov/ecosystems/sanctuaries/ca_nms1.html\\$



OCNMS will be conducting its first Management Plan Review since its inception into the Sanctuary Program in 1994 and the data synthesis will allow the managers to have a firm understanding of the available data that exist for the region and how they can be incorporated into the review. Anticipated products and activities will include: 1) a living GIS data inventory that will identify existing knowledge of the biota and habitats for the region, and 2) identification of data gaps that are needed for effective management.

QUESTIONS TO BE ADDRESSED

- 1. What data currently exists, both within and adjacent to the Sanctuary that may identify regions of particular importance for species, communities, or ecosystems?
- **2.** Does an analysis of existing data reveal biologically meaningful and statistically significant patterns in the distribution of marine associated fauna and flora? What are the management implications?
- **3.** Which habitats and locations are unique and productive (e.g. high diversity), and how are these areas utilized by living marine resources?
- **4.** Where existing data is insufficient to address the above questions, can we model potential distribution patterns (occurrence likelihood) to aid in the assessment?
- **5.** What significant gaps exist in our knowledge of biological, and physical characteristics of the study area?



PROJECT PERIOD

January 2005 through December 2007

CONTACT INFORMATION

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For more information:

http://galapagos.nos.noaa.gov/ecosystems/sanctuaries/olympic_nms.html